

Title (en)  
High gas flow rate-apparatus.

Title (de)  
Gerät für grössere Gasströme.

Title (fr)  
Appareil pour débit de gaz élevé.

Publication  
**EP 0419231 A2 19910327 (EN)**

Application  
**EP 90310251 A 19900919**

Priority  
US 40976689 A 19890920

Abstract (en)  
High gas flow requirements of large size lines are conveniently provided by a series of high pressure tubes connected to header means adapted to control the storage and distribution of gas to the lines at desired flow rates for relatively short periods of time. Gas thus supplied can conveniently be used as a propelling gas stream for the in-situ cleaning of large size lines under high exit velocity conditions requiring the supply of gas at a high flow rate not conveniently supplied by conventional pumpers.

IPC 1-7  
**B08B 9/02**; **B24C 3/32**; **F17D 1/04**

IPC 8 full level  
**B08B 9/02** (2006.01); **B24C 3/32** (2006.01); **F17D 1/04** (2006.01)

CPC (source: EP US)  
**B08B 9/0325** (2013.01 - EP US); **B08B 9/0328** (2013.01 - EP US); **Y10T 137/4857** (2015.04 - EP US); **Y10T 137/4874** (2015.04 - EP US); **Y10T 137/4891** (2015.04 - EP US); **Y10T 137/6914** (2015.04 - EP US)

Cited by  
EP0926428A3

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0419231 A2 19910327**; **EP 0419231 A3 19910814**; **EP 0419231 B1 19940406**; AT E104036 T1 19940415; BR 9004676 A 19910910; CA 2025712 A1 19910321; CA 2025712 C 19940503; DE 69007919 D1 19940511; DE 69007919 T2 19940721; ES 2051477 T3 19940616; JP H03118887 A 19910521; JP H0738975 B2 19950501; MX 170854 B 19930920; US 4977921 A 19901218

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